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REUSABLE ORTHOPAEDIC INSTRUMENT

This patent application is a continuation of and claims priority to and the benefit of U.S. Utility patent application Ser. No. 13/457,752 entitled "REUSABLE ORTHOPAEDIC INSTRUMENT HAVING DRAIN HOLES," by Kyle Thomas, which was filed on Apr. 27, 2012, and U.S. Pat. No. 8,187,283 entitled "REUSABLE ORTHOPAEDIC INSTRUMENT HAVING DRAIN HOLES," by Kyle Thomas, which was filed on Sep. 30, 2008, the entireties of which are expressly incorporated herein by reference.

TECHNICAL FIELD

The present disclosure relates generally to reusable orthopaedic instruments, including reusable orthopaedic trials.

BACKGROUND

Various orthopaedic surgical procedures involve the use of a number of orthopaedic instruments, including orthopaedic trials, for example. For example, during a typical total knee arthroplasty (TKA) tibial trials, such as tibial trial trays and tibial trial inserts, are used to assist a surgeon in preparing the tibial surface for implantation of the tibial portion of the artificial knee. A surgeon often uses a tibial insert trial to determine the tibial implant size and to ensure a proper alignment and tibial component thickness prior to implanting the tibial components themselves, for example.

Certain types of orthopaedic instruments such as saw blades, for example, are made of metal, but others, such as trials for example are oftentimes formed from molded polymers. Many such orthopaedic instruments are cleaned and sterilized after use in a particular orthopaedic surgical procedure and then reused in subsequent surgical procedures. In a typical cleaning or sterilization process, the tools may be autoclaved. In such a process, the reusable orthopaedic tools are placed in sterilization trays for cleaning and sterilization.

SUMMARY

According to one aspect of the present disclosure, a reusable orthopaedic instrument includes a reusable orthopaedic trial having a first outer surface and a second outer surface that is opposite the first outer surface. The second outer surface includes a drainage surface that has a plurality of sidewalls extending outwardly therefrom to form a cavity. A drain hole is formed in the drainage surface at a location within the cavity such that the drain hole extends through the orthopaedic trial from the second outer surface to the first outer surface. Further, the drainage surface slopes downwardly from the plurality of sidewalls toward the drain hole.

In one illustrative embodiment, the reusable orthopaedic trial may be one of a femoral trial, a tibial trial, a tibial insert trial, a tibial augment trial, a femoral augment trial, a tibial stem trial, a femoral stem trial, a hip cup trial, a hip liner trial, a hip stem trial, a shoulder cup trial, a shoulder liner trial, a shoulder stem trial, and a trauma trial.

In another illustrative embodiment, the reusable orthopaedic trial may be made from a polymer material. Further illustratively, the reusable orthopaedic trial may be made from an injection molded polymer material.

In still another illustrative embodiment, the plurality of sidewalls may be positioned around the entire periphery of the cavity.

In yet a further illustrative embodiment, the second outer surface may include a second drainage surface including a

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second plurality of sidewalls extending outwardly therefrom to form a second cavity. A second drain hole may be formed in the second drainage surface at a location within the second cavity such that the second drain hole extends through the reusable orthopaedic trial from the second outer surface to the first outer surface. Illustratively, the second drainage surface may slope downwardly from the second plurality of sidewalls forming the second cavity toward the second drain hole.

According to another aspect of the present disclosure, a reusable orthopaedic instrument includes a body having a first outer surface and a second outer surface that is opposite the first outer surface. The second outer surface includes a drainage surface including a plurality of sidewalls extending outwardly therefrom to form a cavity. A drain hole is formed in the drainage surface at a location within the cavity such that the drain hole extends through the body of the orthopaedic instrument from the second outer surface to the first outer surface. The drainage surface slopes downwardly from the plurality of sidewalls toward the drain hole.

In one illustrative embodiment, the reusable orthopaedic instrument may be a reusable orthopaedic trial. Illustratively, at least a portion of the first outer surface may define an outer, bearing surface of the reusable orthopaedic trial. As such, the drain hole may be formed through the outer, bearing surface.

In another illustrative embodiment, the reusable orthopaedic instrument is one of a knee instrument, a hip instrument, a shoulder instrument, and a trauma instrument.

In still another illustrative embodiment, the body of the reusable orthopaedic instrument is made from an injection molded polymer material.

In yet another illustrative embodiment, the reusable orthopaedic instrument may be configured to be used in an orthopaedic surgical procedure, sterilized, and reused in a subsequent orthopaedic surgical procedure.

In a further illustrative embodiment, wherein the plurality of sidewalls of the body of the reusable orthopaedic instrument may be coupled to each other.

In another illustrative embodiment, the drain hole may be generally equidistant from each of the plurality of sidewalls.

In still another illustrative embodiment, the second outer surface may also include a second drainage surface including a second plurality of sidewalls extending outwardly therefrom to form a second cavity. Further, a second drain hole may be formed in the second drainage surface at a location within the second cavity. Illustratively, the second drain hole may extend through the body of the orthopaedic instrument from the second outer surface to the first outer surface. The second drainage surface may illustratively slope downwardly from the second plurality of sidewalls toward the second drain hole.

In yet another illustrative embodiment, the plurality of sidewalls may include a curved sidewall portion. Further, the plurality of sidewalls may include a plurality of interconnected curved sidewall portions positioned around the entire periphery of the drainage surface.

According to still another aspect of the present disclosure, a reusable orthopaedic device for use in an orthopaedic surgical procedure includes a reusable orthopaedic instrument having a first outer surface and a second outer surface that is opposite the first outer surface. The second outer surface includes a drainage surface that has a plurality of sidewalls extending outwardly therefrom to form a cavity. A drain hole is formed in the drainage surface at a location within the cavity such that the drain hole extends through the reusable orthopaedic instrument from the second outer surface to the first outer surface. Finally, the drainage surface slopes downwardly from the plurality of sidewalls toward the drain hole.